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# How daily operational meetings can support transformation to a lean improvement culture

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## Abstract

With pressure for creating more value with fewer resources, many organizations pursue becoming *Lean*. However, many are unsuccessful in the transformation necessary for sustainable change, such as creating an improvement culture. This study investigates how operational meetings, offering frequent touch points, can be used to intentionally support cultural transformation. An explorative case study identified more than 30 types of meeting activities in five categories: Information, Action, Sparring, Learning, and Relational. A comparative case study then investigated meeting set-ups and their role in supporting cultural change. The analysis shows how meeting set-ups can be designed to support cultural transformation.

**Keywords:** Lean, Culture, Transformation

## Introduction

For decades, companies have pursued becoming more *Lean* to increase their competitiveness and optimizing resource utilization (Arlbjørn & Freytag, 2013).

However, many companies only gain short-term effects and are not successful in the cultural transformation necessary for sustainable change, such as creating an improvement culture (Liker, 2004; Liker and Morgan, 2011). There seems to be a lack of explicit practices focused on leading the culture change through human-focused management practices. Studying lean transformations, Bartoletti et al. (2015) identify successful organisational cultures as characterised by higher levels of institutional collectivism, future orientation and human orientation. Also, the successful transformations tended to emphasize the softer Lean practices such as small group problem solving, supplier partnerships and training employees to do different tasks. These softer practices also include non-financial rewards such as “town hall meetings” to celebrate employees’ achievements or frequent evaluation at the shop floor with visualisation of performance (Netland et. al, 2015). This explicit management of organizational culture involving human-focused and soft lean management practices thus seems to be associated with successful transformation. Still, some of the most

obvious touch points for managing the organizational culture; operational meetings (e.g., Hansen & Møller 2016), have received little attention from scholars of Lean (e.g., Shah & Ward 2007; Spear & Bowen, 1999; Liker 2004), even though they appear to be an occasion for managers to influence organizational culture (Bititci et al. 2015).

The purpose of this paper is to investigate the role of operational meetings in enabling and supporting Lean culture transformation and is focused on answering the following research question: How can operational meetings be used to support cultural transformation to a Lean improvement culture?

### **Operational Meetings and Continuous Improvement**

The forms and content of operational meetings are, and have long been, stressed as critical elements in enabling and driving continuous improvements within an organization. Imai concluded already in 1986 that all the Kaizen (continuous improvement) programs implemented in Japan needed several factors related to the form and content of operational meetings such as: Formation of small-group activities such as Quality Control circles; Support and recognition for worker's kaizen efforts; Conscious efforts for making the workplace a place where workers can pursue life goals; and bringing social life into the workshop as much as practical

Furthermore, the small-group activities, then defined as “informal, voluntary small groups organized within the company to carry out specific tasks in the workshop” (Imai, 1986, p.96) were described as taking a variety of forms such as: big-brother groups, QC circles, ZD movements, no-error movements, level-up movements, mini think tanks, suggestion groups, safety groups, workshop involvement movements, productivity committees, management-by-objectives groups, and workshop talk groups. Each group, and corresponding meeting form and content, having a critical role in creating the cooperative atmosphere and culture that is an inseparable part of any Kaizen program.

It can also be noted that the differences between Japanese and Western approaches of quality management suggest that there could still be a catch up to do in relation to Japanese group and meeting practices. The review of Dahlgaard-Park (2011, p.513) concludes that in the Japanese approaches to quality management the focus area has been “building people, organizational culture and process (focus on enablers)” while in the Western approaches the focus area has been “Measurement and results”.

In relation to the current practices of quality management, there is currently a large interest among practitioners and consultant in understanding, applying and sharing insights concerning the emerging practices of Toyota Kata (Rother, 2009). It is described to come from a desire to explain and understand the underlying management system at Toyota that can show sustainable continuous improvements and adaptability to internal and external changes. The research behind Toyota Kata was according to Rother (2014) driven and initiated by the question: “*What are the unseen managerial routines and thinking that lie behind Toyota's success with continuous improvement and adaptation?*” (Rother, 2014, p. 1). The most widespread practices from this source are the two interlinked “Katas”, with one being “the improvement kata” and the other “the coaching kata” (Rother, 2009). The improvement kata is driven during frequent operational meetings by the use of five specific questions in a “coaching cycle”. It can also be described as consisting of the four phases: Understand the direction or challenge, grasp the current condition, establish the next target condition, and lastly experiment toward the target condition. This is a structured method to solve problems by iteratively develop solutions and knowledge about the situation and the process under study. The second kata, the coaching kata is a master-apprentice coaching model aiming at teaching the improvement kata to the apprentice and indirectly also to the

system or organization. The two Katas indicate that the focus can be understood as not only being related to the realisation of operations but also as being strongly related to learning and building new capabilities.

In research of continuous improvement maturity many other elements relevant mentioned as having an impact on the development of improvement culture such as operational meetings (Bessant & Francis, 1999).

### **Understanding and Approaching a Lean Improvement Culture**

Lean improvement culture has been studied at Toyota by many scholars such as Liker (2004). The studies have identified and described continuous improvement tools and behavior (Liker and Convis, 2011) as well as how the foundation of the behavioral codex of the Toyota Way consists of the five values: Challenge, Kaizen, Genchi Genbutsu, Respect and Teamwork. These descriptions help us understand what a Lean improvement culture looks like and its effect.

However, even though these good examples are well described, knowledge about how to create the cultural transformation is scarce. Liker and Morgan (2006) highlight a number of challenges for researching and developing Lean and improvement cultures, which include understanding systems perspective and how learning cultures evolve. The challenges are further discussed in Liker and Morgan (2011), who present three methodological challenges to address in Lean research: 1) Lean and improvement culture exists as an emergent system: In order to be effective Lean requires integration of people, processes, and tools, which means that hypotheses of individual best practices cannot be tested since a systems view assumes complex interactions between the variables. A reductionist view of isolated elements of the system might lead to misleading conclusions. 2) Lean and improvement culture is a dynamic evolving process: Measurement at one slice in time only represents a stop in the journey, thus research needs to be longitudinal. 3) Lean is an evolving culture: Lean should not be judged only on the structure of work processes since the culture is an essential feature of the system, and thus, people's way of thinking should also be captured. Based on these challenges they suggest that research should be based on in-depth cases studied over time with action research and non-deterministic research questions (Liker & Morgan, 2011). Based on these research implications, this study focused on setting up a research design that would be able to capture and discuss the daily behavior that influence an evolving culture.

Hansen (2015) presents a framework for describing different improvement strategies, i.e., approaches to continuous improvement, see figure 1.

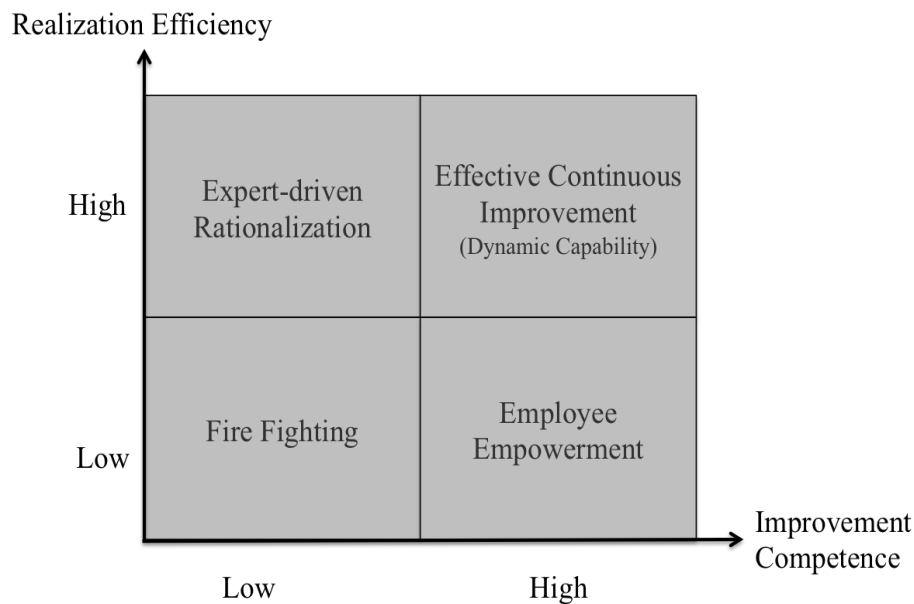


Figure 1 – Improvement strategy framework

The improvement strategy framework show four main archetype approaches to organisational improvement: *Fire fighting* meaning ad hoc improvement when necessary, *expert-driven rationalisation* meaning emphasis on realisation of specific changes, *employee empowerment* meaning emphasis on developing improvement competencies and other organisational improvement capabilities, and *effective continuous improvement* meaning a simultaneous focus on realisation of changes and building improvement capabilities.

In order to create a Lean improvement culture transformation an improvement strategy characterised as effective continuous improvement is necessary. This strategy requires activities that support people in immediate realisation of improvements and activities that support the development of organisational improvement capabilities. Hansen & Møller (2016) show that the development of organisational improvement capability is an evolving process that is supported by the development of organisational settings around the improvement activities. These organisational settings include operational meetings. The improvement framework thus provides a way of investigating the development of Lean improvement culture by investigating how different operational meetings emphasize the two dimensions.

## Methodology

The role of operational meetings for enabling and supporting cultural transformation was investigated in two steps: First, by creating categories of meeting activities through an explorative case study and second, by using the categories to analyze Lean transformation efforts in a comparative case study of three organizations.

The explorative case study used an inductive approach inspired by Glaser and Strauss (1967) where a large number of observations were used to iteratively to create categories for meeting activities. This was carried out over a period of one year where the researchers attended over 100 operational meetings to identify and analyze what meeting activities were carried out and how each of them could be assessed into a position in the improvement strategy framework. Iteratively, activities were mapped creating a pattern of distinct categories. Saturation was reached when all observed meeting activities could be clearly categorized, creating distinct categories of meeting activities.

The comparative case study was carried out by using the categories to analyze all operational meetings at three case organizations. The researchers visited each case organization at least 5 times to map all operational meetings through observations and interviews. The analysis was done by mapping the meeting practices for each organization according to the activity categories and using the mapping to compare different meeting set-ups. Then, the consequent role for supporting culture transformation was assessed based on the improvement strategy framework.

The case organization for the explorative study was identified due to an explicit focus on developing an improvement culture and their active use of operational meetings. The three organizations for the comparative study were chosen due to their focus on Lean and due to their differences allowing for the opportunity to study operational meetings in three distinct cases. The first organization was a medical device manufacturer with approximately 100 operational employees. The second organization was a unit of a governmental organization with administrative responsibilities and approximately 30 operational employees. The third organization was an analytical unit at a hospital with approximately 35 operational employees.

### Results of explorative study

The explorative study was used to identify meeting activities and to assess their focus in terms of capability building or realisation. Some examples are shown in Table 1.

Table 1 – Examples of some of the identified meeting activities.

<b>Meeting activity</b>	<b>Short description</b>	<b>Focus [capability; realisation]</b>
Initiate action	Deciding on and describing the actions that should be taken subsequent to the meeting. Often adding a date and the initials of the responsible.	0;6
Initiate problem solving	Deciding on and describing the actions that should be taken to clarify a situation and then decide on actions to take.	1;8
Follow up on action	The person responsible for an action informs if the action has been taken and the effect	2;5
Coordinate action	Two or more persons agreeing on who does what when responsibilities overlap	1;3
Information from partners	Persons that collaborate with the team inform about actions that will influence the team (e.g. a large rebuilding project, external audit, new equipment)	3;3
Tell a joke	A wheel was spun to decide who to tell a joke, in the particular environment building up trust and connections.	2;0
Relational talking	Meeting participants talking about something that builds up relations that can be leveraged for collaboration.	4;0
Discuss data	Discussions between meeting participants about the relevance and validity of data used to visualize performance.	4;1
Discuss which	Discussions about which course of action would be feasible	3;5

data to take	given the circumstances. The discussion can be informed by the data provided or the personal knowledge.	
Align expectation	Meeting participants clarify and align expectations to coordinate actions.	7;2
Cancel meeting	Meeting gets cancelled underway for some reason	0;0

These meeting activities were plotted into a chart to analyse patterns. This process was iterated until saturation was reached and no new meeting activities were identified that could not fit into the patterns. Figure 2 shows the result of the categorisation of meeting activities.

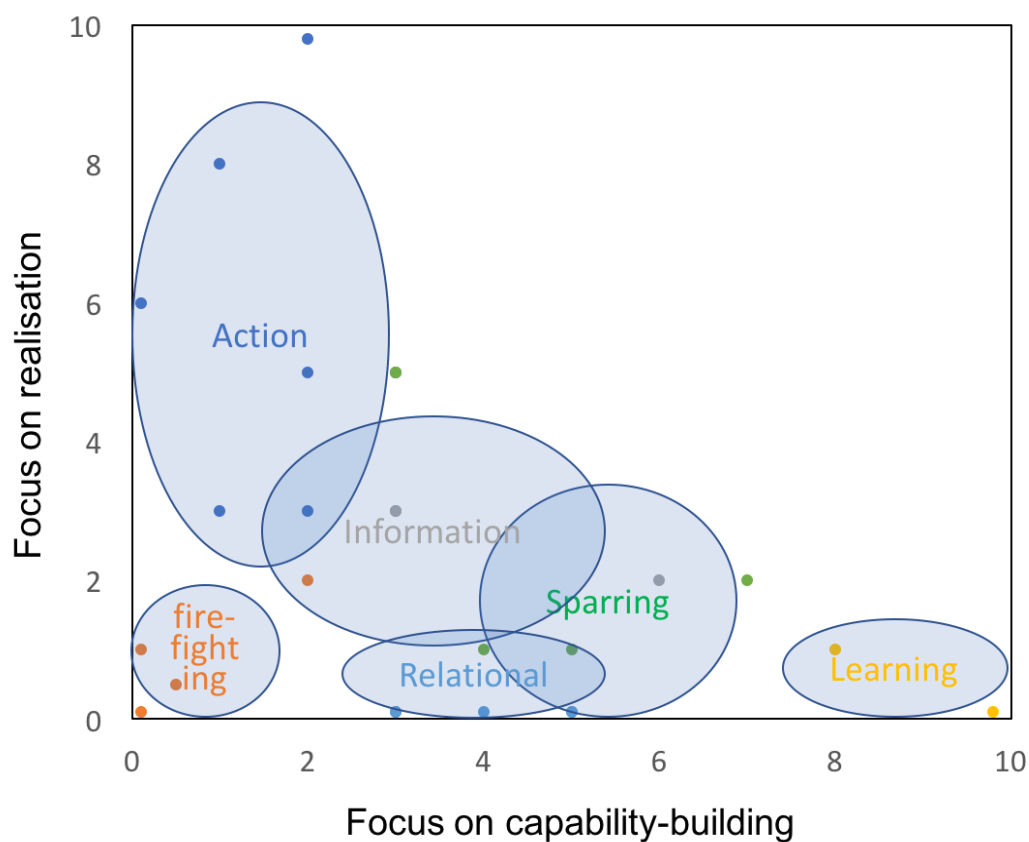


Figure 2 – Categorisation of meeting activities

The study identified five categories of meeting activities: (I) exchange of information, (A) delegation of operational action, (S) sparring/coaching on key challenges, (L) learning through sharing and reflection, and (R) development of relationships. The meeting activities I and A primarily support direct realisation, where L, R, and S activities primarily support development of organizational capability. The categories form the acronym LIRAS.

Based on the pattern study, the five meeting activity categories were given an average score in terms of their respective focus on realisation and capability-building.

Table 2 – Average focus for each category.

Meeting activity category	Focus on realisation	Focus on capability-building
Information	4	4.8
Action	5.7	1.6
Sparring	2.3	4.8
Learning	0.5	9
Relational	0	4

### Results of comparative study

The second analysis had the purpose of investigating different meeting set-ups. This was done by mapping the meeting practices for each organization according to the activity categories and using the mapping to compare different meeting set-ups.

Each regular meeting was registered and after observations at the meeting its content was described using the LIRAS framework. The meeting was assessed as having either 1, 0.5, or 0 content of each category of LIRAS denoted as upper case, lower case or no letter.

After the meeting set-up was mapped at each organisation, a calculation of its total focus on realisation and capability, respectively, was carried out. The calculation was done by multiplying the content score with the weekly frequency and the average focus score of each category shown in table 2.

Table 3 – Meeting set-up at organisation A.

Meeting name	Content	Frequency/ week
Department stand up meeting	IASr	5
Production operational meeting	IA	5
Problem solving coordination meeting	iAS	5
Hand over meeting	IAr	5
Team meeting	Iar	1
Kaizen meeting	ASL	2
Calculated realization focus points:	230	51%
Calculated capability-building focus points:	220	49%



Table 4 – Meeting set-up at organisation B.

Meeting name	Content	Frequency/ week
Department meeting	Ia	1
Work distribution meeting	As	5
Coffee meeting	Rs	1
Calculated realization focus points:	42.2	57%
Calculated capability-building focus points:	31.6	43%

Table 5 – Meeting set-up at organisation C.

Meeting name	Content	Frequency/ week
Department meeting	Is	1
Hand over meeting	IAr	5
Stand up meeting	i	10
Calculated realization focus points:	73.6	50%
Calculated capability-building focus points:	72.5	50%

The comparative analysis shows that organisations can create meeting set-ups that contribute differently to what improvement strategy is actively carried out. The study shows how the configuration of meetings can be an active support a transformation into a Lean improvement culture. Organisations that pursue an ad hoc improvement culture can design a meeting set-up with few touchpoints for improvements while organisations that want a highly effective Lean improvement culture can design a meeting set-up that quite actively contributes to this aspiration.

The three studied organizations have distinct meeting set-ups which reflect their current improvement strategy and this in turn support the cultural transformation differently. The studied organization A is a good example of an organization that actively have decided to pursue a cultural transformation and to support it by considering what activities should take place during the operational meetings, consequently designing a meeting set-up that supports the improvement strategy. On the other hand, organization B has a meeting set-up that only contributes to ad-hoc improvements. Figure 3 illustrates the three organisations' meeting set-ups described relative to each other through an aggregation of activities' focus on realization and capability-building, respectively.

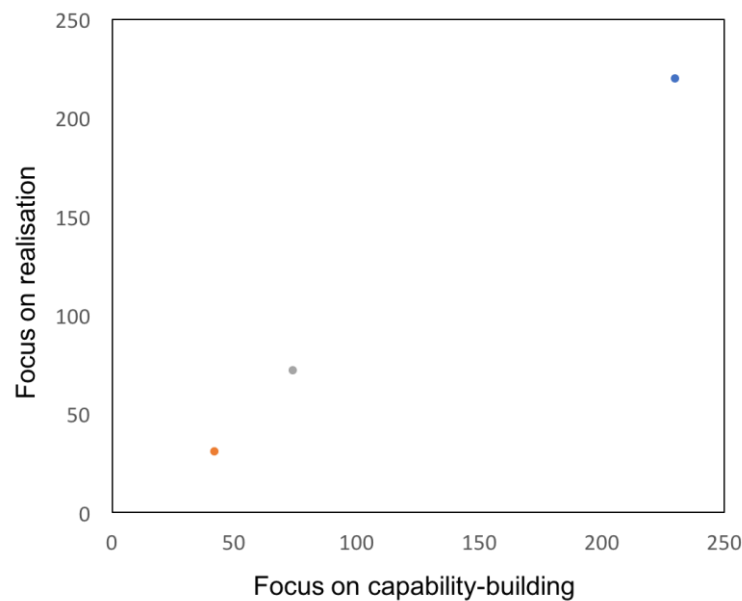


Figure 3 – Meeting set-up focus relative to each other.

These reflections only refer to the way operational meetings influence the cultural transformation. Many other activities could be used instead of meetings such as Kata coaching leadership as described in the introduction. Meetings should not be the only element to consider, although the study shows that they can be used as an important leverage for intentionally supporting cultural transformation.

## Conclusions

The paper investigates the role of meetings in supporting the transformation to a Lean improvement culture. Through an explorative study, the paper contributes with categories of meeting activities that can be used to assess and design meetings as well as meeting set-ups to support particular improvement strategies. Researchers are welcomed to use the meeting categories to further investigate the role of meetings to support organizational culture transformation. Practitioners are encouraged to use the categories to better understand the role meetings and meeting set-ups can play, and to experiment with meetings as a driver for cultural transformation.

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